
8. Sandbox

Program Name: Sandbox.java

Input File: sandbox.dat

George owns a landscaping business. One of the things customers buy is sand for their child's sandbox which he sells in bags, each of which contains 2 cubic feet of sand. He needs you to write an app that will tell the customer the number of bags he needs to buy to fill a sandbox given the length and width of the sandbox in feet and the depth in inches.

Input

The first line of input will contain a single integer n that indicates the number of sandboxes to follow. Each of the following n lines will contain three positive integers l w d , where l is the length in feet of the sandbox, w is the width in feet of the sandbox, and d is the depth in inches of the sandbox.

Output

For each sandbox and on a single line, you will print the number of bags of sand the customer will need to buy to fill the sandbox.

Example Input File

```
4
3 4 8
8 10 10
12 7 12
4 3 14
```

Example Output to Screen

```
4
34
42
7
```